

APOLLO PROGRAM DIRECTIVE NO. 32

MA 009-032-1A

TO : DISTRIBUTION

FROM:


APOLLO PROGRAM DIRECTOR

SUBJECT : Reliability and Quality Assurance Auditing

- REFERENCES:
- a. NHB 5300.1A, Apollo Reliability and Quality Assurance Program Plan
 - b. NPC 200-2, Quality Program Provision for Space System Contractors
 - c. NPC 250-1, Reliability Program Provisions for Space System Contractors

I. PURPOSE

The purpose of this Directive is to specifically identify responsibilities for planning, conducting, and reporting on audits of reliability and quality program activities at all Apollo organizational levels.

II. SCOPE

This Directive is applicable to audits conducted of all Apollo R&QA Offices, appropriate Government Inspection Agencies, Apollo Contractors, Subcontractors and Suppliers. The R&QA Program activities for all Apollo flight and ground systems and equipment will be audited.

III. RESPONSIBILITIES

All NASA Apollo Program R&QA Offices shall be responsible for the implementation of requirements established by this Directive.

IV. ACTION REQUIRED

A. Audits

The following organizations will audit the lower level organizations as indicated:

1. The Apollo Program Office will audit all MSF Center Apollo R&QA Offices.
2. Center Apollo Program R&QA Offices will audit line organizations assigned Apollo R&QA responsibility,

or delegate such audit requirements to an appropriate Center organization. They will similarly audit Government Inspection Agencies assigned to Apollo Contractors, Subcontractors and suppliers.

3. Center Apollo Program R&QA Offices will audit (or delegate authority to Government Inspection Agencies to audit) Apollo R&QA activities at Contractor, Subcontractor, and supplier plants.
4. Center R&QA Office shall require Apollo Contractors/ Subcontractors to audit in-house R&QA activities and those of subcontractors and suppliers.
5. In order to minimize the need for duplicate audits and provide for an exchange of experience, audit team membership should include a selective combination of representatives from Centers, Contractors, engineering, and manufacturing, as well as the auditing agency's Reliability and Quality organization. Membership should be selected on the basis of recognized responsibility and authority compatible with the level of the audit.

B. Audit Procedures

General guidelines for audit procedures are contained in References a, b, and c. These procedures should be implemented in such a way that technical hardware problems can be related to deficiencies in engineering, manufacturing, or quality assurance functions. In those instances where a delegated agency is performing an audit for one or more other organizations, the audit agency shall coordinate and obtain approval for procedures.

C. Reports

Reports of audit findings shall be prepared immediately following each audit. Distribution of reports should be made to all organizations having responsibility for implementing recommendations. Reports shall be made available on request of higher level organizations.

The Apollo Program Reliability and Quality Office (Code MAR) shall be notified of all audits performed.

D. Schedules

In order to avoid duplication of audits, the Apollo Program Reliability and Quality Office shall develop scheduling and

coordination procedures in conjunction with Center Program Offices. Schedules shall be published periodically as required to keep Centers informed of audit plans. Schedules should provide for an audit of each activity at least once each year and not more frequently than once each six months. This does not preclude conduct of special reviews at any time to investigate specific problem areas.

IV. IMPLEMENTATION

The requirements of this Directive are effective immediately and the implementation shall be periodically reviewed for compliance by the Apollo R&QA Office.